

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-18. (Canceled).

19. (Currently Amended) A waste balancing system for medical use comprising:
a first container containing a fluid waste;
a second container containing a replacement fluid;
a support supporting the first and second containers in a stacked relationship such
that the weight of one of the first and second containers bears on the other of the first and
second containers,

the first and second containers having flexible walls in direct contact with each
other such that said containers form a column of fluid which conforms to the shape and
size of the support; and

a pressure sensor in pressure communication with at least one of the first and
second containers and located at a bottom of the support such that the pressure sensor
indicates a height of the column of fluid;

a controller connected to control a pump and to receive a signal from said pressure
sensor and control a rate of flow of at least one of said fluid waste and said replacement
fluid to and from said first and second containers responsively to said signal, such that a
constant height of the column of fluid is maintained and thereby maintaining a constant
total mass of fluid in both of the first and second containers combined.

20. (Currently Amended) The waste balancing system of claim 19_a further comprising a detector configured to detect an emptying of one of said first and second containers, said controller being configured to control said flow responsively to said detector by emptying waste from the first container and adding replacement fluid to the second container in such a manner that the height of the column of fluid is achieved.

21. (Currently Amended) The waste balancing system of claim 19_a wherein the first container is stacked on top of the second container and the support defines a vessel with rigid walls in which the first and second containers rest.

22. (Currently Amended) The waste balancing system of claim 19_a wherein the pressure sensor is adjustable.

23. (Currently Amended) A blood treatment system comprising:
blood treatment means for clearing a patient's blood of toxins;
a fluid balancing system comprising:
a first flexible container means containing a fluid waste;
a second flexible container means containing a replacement fluid;
a support supporting the first and second containers-container means in
cooperating relationship such that a pressure in at least one of said first and second
containers-container meansis indicative of a combined weight of said first and second
containers-container meanswith their respective contents;

a pressure sensor in pressure communication with at least one of the first and second ~~containers~~container means;

a blood treatment machine and a conduit connectable to the blood treatment machine; and

a controller configured to control a rate of flow of replacement fluid responsively to the pressure sensor ~~such that a combined weight of the first and second container means is maintained at a constant level, whereby a flow from one of the first and second containers means is offset by a flow into the other of the first and second container means.~~

24. (Currently Amended) The blood treatment system of claim 23, wherein the blood treatment machine comprises a hemofilter.

25. (Currently Amended) The blood treatment system of claim 23, wherein the blood treatment machine comprises a dialyzer.

26. (Currently Amended) The blood treatment system of claim 23, further comprising a removable disposable cartridge containing at least part of the first container ~~means~~ as an integral part of the removable disposable cartridge.

27. (Currently Amended) The waste balancing system of claim 23, wherein the first container ~~means~~ includes an expandable container.

28. (Currently Amended) A blood treatment system comprising:

blood treatment means for clearing a patient's blood of toxins;

a fluid balancing system comprising:

a first container containing a fluid waste;

a second container containing a replacement fluid;

a support supporting the first and second containers in cooperating relationship such that a pressure in at least one of said first and second containers is indicative of a combined weight of said first and second containers with their respective contents;

a pressure sensor in pressure communication with at least one of the first and second containers;

a blood treatment machine and a conduit connectable to the blood treatment machine;

a controller configured to control a rate of flow of replacement fluid responsively to the pressure sensor; and

~~The waste balancing system of claim 23 further comprising a piston separating the first and second containers.~~

Claims 29-39. (Canceled).

40. (New) The waste balancing system of claim 19, wherein the pressure sensor is operatively connected to an outlet of one of the first and second containers.

41. (New) The blood treatment system of claim 23, wherein the pressure sensor is operatively connected to an outlet of one of the first and second flexible container means.